

AMENDMENTS

In the Claims:

Please amend the claims as follows:

1. (Amended) A test plate for fluorescence imaging systems comprising:
 - a) a surface comprising at least a first chemical group for binding;
 - b) fluorescent microbeads, wherein the fluorescent microbeads comprise at least a second chemical group that is **covalently** bound to the at least first chemical group on the surface; and
 - c) a polymeric layer in which the fluorescent microbeads are embedded.
2. (Originally presented) The test plate of Claim 1, wherein the polymeric layer comprises a polymer selected from the group consisting of polyurethane, polyacrylate, polysilicones, polyglycols, and polyvinyl alcohol.
3. (Canceled)
4. (Originally presented) The test plate of Claim 1 wherein the at least first chemical group comprises a reactive amine group.
5. (Originally presented) The test plate of Claim 4 wherein the at least first chemical group comprising a reactive amine group is selected from the group consisting of collagen I, bovine serum albumin, fibronectin, laminin, fragments thereof, and organosilanes.
6. (Originally presented) The test plate of Claim 4 wherein the at least second chemical group comprises a chemical group selected from the group consisting of carboxylate groups, amide groups, or sulfhydryl groups.
7. (Originally presented) The test plate of Claim 4 wherein the at least second chemical group comprises a carboxylate group.
8. (Originally presented) The test plate of Claim 1, wherein the fluorescent microbeads further comprise at least a third chemical group.
9. (Originally presented) The test plate of claim 1 wherein the polymeric layer is doped with a fluorophore that is optically distinguishable from the fluorescent microbead.
10. (Originally presented) The test plate of claim 1 wherein the fluorescent microbeads comprise fluorescent microbeads of different sizes.

11. (Originally presented) The test plate of claim 1 wherein the fluorescent microbeads comprise fluorescent microbeads of uniform size.
12. (Originally presented) The test plate of claim 1 wherein the fluorescent microbeads in total comprise two or more fluorophores, and where the two or more fluorophores are optically distinguishable.
13. (Originally presented) The test plate of claim 1 wherein the polymer layer comprises a series of polymer islands.
14. (Originally presented) The test plate of Claim 1 wherein the surface comprises wells and wherein the fluorescent microbeads are located within the wells.
15. (Originally presented) The test plate of Claim 14 wherein the fluorescent microbeads are monodispersed in the well.
16. (Amended) A method of making a fluorescence imaging system test plate comprising:
- a) providing a surface comprising at least a first chemical group;
 - b) providing fluorescent microbeads, wherein the fluorescent microbeads comprise at least a second chemical group that is capable of covalently binding to the first chemical group;
 - c) contacting the surface with the fluorescent microbeads under conditions to permit covalent binding of the at least first chemical group and the at least second chemical group; and
 - d) adding a polymeric layer to the surface, wherein the polymeric layer is selected from the group consisting of polyurethane, polyacrylate, polysilicones, polyglycols, and polyvinyl alcohol, wherein the fluorescent microbeads are embedded in the polymeric layer.
17. (Originally presented) The method of Claim 16 wherein the method further comprises drying the test plate prior to the addition of the polymeric layer.
18. (Canceled)
19. (Originally presented) The method of claim 16 wherein the polymeric layer comprises a polymer selected from the group consisting of polyurethane, polyacrylate, polysilicones, polyglycols, and polyvinyl alcohol.
20. (Originally presented) The method of Claim 16 wherein the method of contacting is selected from the group consisting of transferring the fluorescent microbeads to the surface and allowing the microbeads to settle to the surface by gravity, and transferring the fluorescent microbeads to the surface and centrifuging the test plates.

21. (Originally presented) The method of Claim 16 wherein the surface comprises wells, and wherein the fluorescent microbeads are contacted with the wells of the surface.

22. (Canceled)

Support for the amendments

The amendments to the claims are fully supported in the claims as filed, and thus the new claims do not constitute new matter.

Election

The applicants hereby elect the invention of group I, claims 1-21 for continued prosecution in the case. This election is made with traverse, as non-elected claim 22 is dependent on claim 1, and thus the searches required for its analysis overlaps with that of the invention of group I.

Claim rejections under 35 USC 102(b)

The patent office rejected claim 1 as being anticipated by Schwartz or Bingham. The applicants traverse this rejection, but have nevertheless amended claim 1 to introduce the limitation of claim 3, which has been acknowledged as patentable by the patent office. Thus, the applicants respectfully request reconsideration and withdrawal of this rejection.

Claim rejections under 35 USC 103(a)

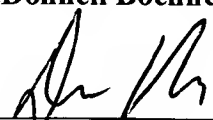
The patent office rejected claims 2 and 16 as being obvious over Schwartz or Bingham. The applicants traverse this rejection, but have nevertheless amended claims 1 and 16 to introduce the limitation of claims 3 and 18, which have been acknowledged as patentable by the patent office. Thus, the applicants respectfully request reconsideration and withdrawal of this rejection.

The Applicants believe that the application is in condition for allowance. If the Examiner believes that a telephone or personal interview would expedite prosecution of the instant application, the Examiner is invited to call the undersigned attorney at (312) 913-2106.

Respectfully submitted,
McDonnell Boehnen Hulbert & Berghoff

Date:

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